Opioid Prescribing and Pain Management: Prescription Monitoring Program Overview and the Management of Acute Low Back Pain
Conflict of Interest Disclosure and Funding Support

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- New Brunswick Department of Health
- New Brunswick Medical Society
  - Choosing Wisely New Brunswick
Learning Objectives

• Describe the risks associated with opioid use (including overdose, duration of therapy, and drug combinations).
• Review the objectives of the prescription monitoring program (PMP) and how it can support decision-making at the point of care.
• Examine the appropriate management of acute low back pain in the primary care setting.
• Identify strategies for communicating the risks versus benefits of opioid therapy with patients.
“The roots of what we now call the opioid crisis can be traced back many years to the promotion of opioid prescribing as low-risk, non-addictive, effective treatments for moderate pain.”

— Centre for Addiction and Mental Health (CAMH), 2016
“Opioids are being prescribed too frequently, at overly high doses and quantities, for longer periods of time than medically necessary, and in contexts that are not supported by evidence — all of which can inadvertently lead to misuse, opioid use disorder, and diversion into the community.”

— CAMH Prescription Opioid Policy Framework
Statistics and Regional Differences

- 2016: 2,946 apparent opioid-related deaths
- Jan. to Sept. 2017: 2,923 apparent opioid-related deaths and counting
- Circles indicate number of deaths per province or territory (rate per 100,000)
- Highest incidence in British Columbia
- Lowest incidences in the territories and Maritimes

Opioid-Related Hospitalizations

- Opioid poisoning hospitalization rate in Canada: 16 per day
- Opioid poisoning hospitalization rate in New Brunswick: 17.8 per 100,000

Opioid poisoning hospitalization rates by province/territory 2016–2017

Canadian Prescribing Trends

Defined Daily Doses Per 1,000 Population for Prescription Opioids, Canada,* 2012 to 2016

- Overall number of opioid prescriptions **increased by 2%** (population-adjusted)
- Doses of opioid prescriptions **decreased by 8.9%** (population-adjusted)

Regional Prescribing Trends Including New Brunswick

Defined Daily Doses Per 1,000 Population for Top Six Opioids, 2016, and Percentage Change From 2015 to 2016, Canada

- New Brunswick: 7,245 defined daily doses per 1,000 population
- New Brunswick: Decrease of 0.5% from 2015 to 2016
- Largest decreases in British Columbia (11.7%) and Nova Scotia (6.0%)

Relationship Between Opioid Prescribing and Morbidity/Mortality

A study by Fischer et al. evaluated the relationship between opioid prescribing and associated morbidity/mortality in Ontario, 2005 to 2011.

**Conclusion:** Prescription opioid analgesic dispensing levels were found to be strongly correlated with mortality and morbidity (treatment) indicators.

Early Opioid Prescriptions and Long-Term Use

• Studies and information from workers’ compensation demonstrate that people who are prescribed opioids early after an injury, or for periods longer than a week, or who receive a second prescription, are more likely to use opioids long-term.1-4

• Studies show that the more opioid prescriptions a person receives, the more likely they are to take opioids long-term, at higher doses, and use opioids of higher potency.
  
  o For example, one study showed that 46% of people who took four prescriptions or more became long-term opioid users.5

Navigating Opioids for Chronic Pain

The Institute for Safe Medication Practices (ISMP) also offers a variety of opioid-prescribing supports and opioid-prescribing tools, including a Prescribing Handout among others, available at: www.ismp-canada.org/opioid_stewardship/
Choosing Wisely – Opioid Wisely

• Central to the campaign are recommendations for when the use of opioids should **not** be first-line therapy.
• Includes informational resources to help patients have informed conversations with health care providers about safe options for managing pain.

Choosing Wisely New Brunswick has identified “Opioid Wisely” as a priority project.

Prescription Monitoring Programs (PMPs)

A pan-Canadian strategy called “First Do No Harm: Responding to Canada’s Prescription Drug Crisis” was launched in 2013.

- The use of prescription monitoring programs, or PMPs, is endorsed as one important component of the overall strategy.

Prescription monitoring programs in Canada: Best practice and program review. Ottawa: Canadian Centre on Substance Abuse; 2015.
The purposes of PMPs include:

1. To enhance patient care and assist in the safe use of controlled prescription drugs by monitoring prescription dispensing information.

2. To help reduce the harms resulting from the use of controlled prescription drugs.

3. To assist in reducing the diversion of controlled prescription drugs.

Prescription monitoring programs in Canada: Best practice and program review. Ottawa: Canadian Centre on Substance Abuse; 2015.
The New Brunswick PMP

- Accessed through eHealthNB

- The full medication summary can be accessed in real time via the Drug Information System, as well as a view of a patient’s monitored drug prescriptions (PMP).

The New Brunswick PMP

• Monitored drugs include opioids, stimulants, and central nervous system depressants (e.g., benzodiazepines).
• The electronic health record and PMP make it easier for health care professionals to use a patient’s most up-to-date prescription information to make safe, more informed decisions about patient care by:
  o sharing electronic health information among health care practitioners
  o providing a comprehensive medication history (of filled prescriptions) for individual patients
  o helping to prevent duplicate medications
  o identifying drug-related problems.

The New Brunswick PMP

Prescription information available in the PMP includes:

- the name of the drug
- its strength
- the amount prescribed, dispensed, and remaining
- directions for use
- the name of the prescriber
- information on the pharmacy where the prescription was filled.
The New Brunswick PMP

- The New Brunswick PMP can trigger alerts in real time to help identify potential issues such as double-doctoring, prescriptions filled at multiple pharmacies, and high quantities of monitored drugs.

- Additional PMP functionality is being developed with the Electronic Health Record Pharmacy Technical Group and other stakeholders.

Sign up at www.eHealthNB.ca for free access today!
PMPs have tended to be “reactive” focusing on identifying the worst cases at the point of dispensing.

Paradigm shift:
- Focus on prevention and the prescriber
- Focus on new patients
- Evidenced-based and guideline supported prescribing of new patients
- Appropriate management of patients on long-term opioids to avoid individuals being “cut-off”
New Canadian Guidelines

The 2017 Canadian Guideline for Opioids for Chronic Non-Cancer Pain

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Key Guideline Recommendations

When starting opioids:

• **Three (3) or fewer days** usually will be sufficient for most non-traumatic pain not related to major surgery.

• Use immediate-release at lowest effective dose.

• Use precautions for > 50 morphine milligram equivalents (MME)/day.

• Avoid increasing to > 90 MME/day.

• Don’t provide more than is needed for expected duration of pain.

• Avoid opioid and benzodiazepine combination.


Determining when to initiate or continue opioids for chronic pain. Rothesay (NB): College of Physicians and Surgeons New Brunswick; 2018.
## Calculating Morphine Milligram Equivalents (MME)

<table>
<thead>
<tr>
<th>OPIOID (doses in mg/day except where noted)</th>
<th>CONVERSION FACTOR</th>
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</thead>
<tbody>
<tr>
<td>Codeine</td>
<td>0.15</td>
</tr>
<tr>
<td>Fentanyl transdermal (in mcg/hr)</td>
<td>2.4</td>
</tr>
<tr>
<td>Hydrocodone</td>
<td>1</td>
</tr>
<tr>
<td>Hydromorphone</td>
<td>4</td>
</tr>
<tr>
<td>Methadone</td>
<td></td>
</tr>
<tr>
<td>1-20 mg/day</td>
<td>4</td>
</tr>
<tr>
<td>21-40 mg/day</td>
<td>8</td>
</tr>
<tr>
<td>41-60 mg/day</td>
<td>10</td>
</tr>
<tr>
<td>≥ 61-80 mg/day</td>
<td>12</td>
</tr>
<tr>
<td>Morphine</td>
<td>1</td>
</tr>
<tr>
<td>Oxycodone</td>
<td>1.5</td>
</tr>
<tr>
<td>Oxymorphone</td>
<td>3</td>
</tr>
</tbody>
</table>

*These dose conversions are estimated and cannot account for all individual differences in genetics and pharmacokinetics.*

Note: Guideline Recommendations

IMPORTANT
The guideline recommendations described on the previous slide are for chronic, non-cancer pain.

THEY DO NOT APPLY TO ACUTE PAIN, CANCER PAIN, OR PALLIATIVE CARE.

Note also that they are for patients BEGINNING opioid therapy.

Alternative strategies must be used for patients already receiving long-term, high-dose opioid therapy.
Case Introduction: Mr. Ross

John Ross
50-year-old male, presenting with acute lower back pain
Initial Assessment

Start by conducting a full assessment of Mr. Ross, including:

- history
- physical and neurological exam
- evaluation of “red flags”
- evaluation of “yellow flags” (psychosocial risk factors).

CASE STUDY: Mr. Ross

Initial Assessment

History: John Ross, a 50-year-old male, is a previously opioid-naive patient who was prescribed a three-day course of Percocet four days ago in the ER. He is now presenting back to you — his family physician — looking for a second Percocet prescription, as his pain has not resolved and he ran out a day ago.

- Mr. Ross states that the Percocet works well, and he needs a few more days of it to get better.
- He rates his pain a 7 out of 10.
- Mr. Ross is new to your practice, having recently moved from another town in New Brunswick. He is a divorced single male living alone and has no children. He has shared that he is on no other meds and has no other medical conditions. His BMI is 31.

A summary of the guideline for the evidence-informed primary care management of low back pain. Edmonton (AB): Toward Optimized Practice; 2015
Low Back Pain “Red Flags”

- Features of cauda equina syndrome including sudden or progressive onset of loss of bladder and bowel control, or saddle anesthesia (Emergency)
- Severe worsening of pain, especially at night or lying down (Urgent)
- Significant trauma (Urgent)
- Weight loss, history of cancer, fever (Urgent)
- Use of steroids or intravenous drugs (Urgent)
- Patients older than 50 years (especially older than 65) with first episode of severe back pain (Soon)
If red flags are evident, consider referring the patient for evaluation (including lab tests and imaging, as indicated) and treatment (e.g., ER, relevant specialist, rheumatologist in the case of inflammatory disease, etc.).

**EMERGENCY:** Referral within hours

**URGENT:** Referral within 24 to 48 hours

**SOON:** Referral within weeks
Low Back Pain “Yellow Flags”

Psychosocial Risk Factors

- Belief that pain and activity are harmful
- “Sickness behaviours” (like extended rest)
- Low or negative mood, social withdrawal
- Treatment expectations that do not fit best practices
- Problems with claim and compensation
- History of back pain, time off, other claims
- Problems at work, poor job satisfaction
- Heavy work, unsociable hours (shift work)
- Overprotective family or lack of support

A summary of the guideline for the evidence-informed primary care management of low back pain. Edmonton (AB): Toward Optimized Practice; 2015
Risks Associated With Prolonged Bed Rest and Return to Work

- Consistent findings show that bed rest is not an effective treatment for acute low back pain but may delay recovery.
- Advice to stay active and to continue ordinary activities results in a faster return to work, less chronic disability, and fewer recurrent problems.

Question: Is opioid therapy the preferred first-line treatment for acute low back pain?
**Opioid Therapy?**

**Answer:** No (opioid therapy is not first line).

**Reason:** Evidence shows that early treatment of acute pain with opioids leads to a higher probability of subsequent opioid prescriptions and opioid dependence without improving pain and recovery outcomes.

If opioids are required for severe acute pain, three days or less is recommended to control the pain while minimizing the potential risks and harms associated with opioid use.

Preferred Pharmacologic Treatment: Acute Low Back Pain

Rather than opioids, consider:

• NSAIDs
  - Ibuprofen — up to 800 mg t.i.d., maximum of 800 mg q.i.d., or
  - Diclofenac — up to 50 mg b.i.d.
  - Consider proton pump inhibitors if patient > 45 years of age.
  - Topical NSAIDs may be considered for localized pain.

• Acetaminophen — up to 1,000 mg q.i.d.

• Short-course muscle relaxants
  - E.g., cyclobenzaprine, 10 mg to 30 mg/day

Pain management & opioids: Addressing important challenges and introducing a chronic pain & opioids mini-book. Saskatoon (SK): RxFiles, Saskatoon Health Region (SHR); 2017.
Mr. Ross’ Pharmacologic Treatment

• Assume no contraindications to NSAIDs for Mr. Ross.
• Prescribe ibuprofen 800 mg t.i.d. for one week, with the plan to follow up at that time.

Note: Non-pharmacologic treatment is also an important part of the management of acute low back pain.

Pain Management & Opioids: Addressing important challenges and introducing a chronic pain & opioids mini-book. Saskatoon (SK): RxFiles, Saskatoon Health Region (SHR); 2017.
CASE STUDY: Mr. Ross

Mr. Ross’ Non-Pharmacologic Treatment

Recommendations for Mr. Ross:
- Stay active.
- Use heat and cold packs for the pain.
- Slowly return to usual activities (including work) as soon as possible.
- Return for a follow-up appointment if the pain worsens or if new symptoms appear.
- Do not stay in bed.

You may also:
- Consider referral to other health care practitioners (physiotherapy, massage, etc.).
- Offer informational resources for Mr. Ross to take home.

Clinically Organized Relevant Exam (CORE) back tool. Toronto: Centre for Effective Practice; 2016.
Patient Resources: Acute Low Back Pain

Patient Handout

What You Should Know About Your Acute Low Back Pain

Facts about acute low back pain:
- Acute means the pain has lasted four to six weeks or less.
- It may be “subacute” or “chronic” if it lasts longer.
- Acute low back pain is very common; about half of all adults have some low back pain at some point in their lives.
- Low back pain is most often caused by back strain and goes away within a few days or weeks without medical treatment.
- Repeated episodes of low back pain are quite common.
- The best way to prevent low back pain is to be physically active.

When should I get professional help for my acute low back pain?
- When it’s severe.
- When it’s getting worse.
- When you’re having trouble controlling your limb or daily function (bending and lifting is the norm). Think of when you’ have your first episode of serious low back pain.

Who can help me?
- Family doctor.
- Orthopaedic physicians.
- Chiropractors.
- Physical therapists.
- Massage therapists.

Do I need x-rays, an MRI, or laboratory tests?
- Once your low back pain is caused by muscle or ligament strain, these tests will show anything else and are not needed.
- Your treating physician will order tests only if the results could help you.

When should I go back to my doctor or healthcare provider for my low back pain?
- If you don’t improve after six weeks.
- If your pain is worse than it was with your activity or exercise.

Patient Brochure

Acute Low Back Pain
So Your Back Hurts...

Learn what works, what doesn’t, and how to help yourself.

What you should know about your acute low back pain. Edmonton (AB): Toward Optimized Practice; 2015.
What if the patient was more adamant about receiving another Percocet prescription, stating that the pain had not improved and that he needed at least the same dose of pain medication (if not more) to get through this?
Question: What are some recommended communication strategies to handle difficult conversations with patients regarding opioid use?
Difficult Conversations About Opioid Use

Motivational Interviewing:
• is patient-centred
• is directive
• enhances a patient’s intrinsic motivation to change
• explores and helps the patient resolve contradicting feelings or ideas.

Difficult Conversations About Opioid Use

Motivational Interviewing Principles

1. Express empathy through reflective listening.
2. Explore the discrepancy between patient’s goals or values and their current behaviours.
3. Explore with patients all feasible options to manage their pain.
4. Adjust to patient resistance rather than opposing it directly.
5. Support self-efficacy and optimism.

Getting Back to Mr. Ross…

So this hypothetical, more challenging version of Mr. Ross also mentions in his discussion with you:

- “I was able to sleep on the Percocet and I have trouble sleeping even without the back pain.”

**Question:** What are some additional considerations that would be important for this case?
CASE STUDY: Mr. Ross

Additional Considerations

- Check electronic health record (EHR) and PMP data to see what Mr. Ross has been prescribed in the past and what he is being prescribed now.
- Screen for other symptoms and conditions (e.g., sleep disorders, substance use disorders, mental health diagnoses):
  - **Sleep Disorders Questionnaire** (Alberta’s Toward Optimized Practice Guidance):
    /www.topalbertadoctors.org/download/2176/Sleep%20Disorders%20Questionnaire.pdf?_20180427204745
  - **Substance Use Disorder Screening Tools**: e.g., CAGE-AID, CRAFFT
  - **Mental Health Screening Tools**: e.g., PHQ-9, GAD-7

What You Find Out…

- Mr. Ross’ EHR information is accessed, and the PMP screen shows one prescription filled two months ago at a pharmacy in the patient’s former hometown for a 30-day supply of lorazepam 2 mg q HS, PRN.
- In the process of administering screening questions to Mr. Ross, he explains that he had a close older brother pass away suddenly almost three months ago from a heart attack.
  - He becomes almost tearful when mentioning this.
  - Mr. Ross also explains that he used the lorazepam for about two weeks to try and help with sleep, but then he stopped because he found he would wake up again after a few hours anyway.
  - Upon further inquiry, Mr. Ross shares that the half-empty bottle of lorazepam was in a cupboard at home, and he took one last night when he was desperate and out of the Percocet.
Question: How might this information on the benzodiazepine prescription change your approach with the patient?
**Safety Warning**

There is a heightened risk of overdose when co-prescribing opioids and benzodiazepines (both are CNS depressants); thus, extra caution is warranted. Clinicians should avoid prescribing opioids and benzodiazepines concurrently, whenever possible.

**CDC Guidance:** Experts agreed that, although there are circumstances when it might be appropriate to prescribe opioids to a patient receiving benzodiazepines (e.g., severe, acute pain in a patient taking long-term stable, low-dose benzodiazepines therapy, or opioid agonist therapy for a patient with opioid use disorder), clinicians should avoid prescribing opioids and benzodiazepines concurrently, whenever possible.

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Policies to prevent harms from the co-prescribing of opioids and central nervous system depressant drugs. Ottawa: CADTH; 2018.
What if There Are Multiple Prescriptions From Multiple Prescribers for Mr. Ross?

Question: How would your approach differ if there is evidence of multiple opioid prescriptions from several prescribers when checking the PMP for Mr. Ross?
What if There Are Multiple Prescriptions From Multiple Prescribers for Mr. Ross?

**Answer:** It is, of course, concerning when a patient is seeing multiple prescribers with the goal of obtaining more opioid prescriptions.

- This highlights the importance of always checking the PMP before prescribing.
- It is important to have a discussion with the patient, including applying the principles of motivational interviewing discussed earlier and working with the patient to optimize alternative non-opioid and non-pharmacologic pain management strategies.
- Lastly, it is important to screen for opioid use disorder.
Question: Given the information Mr. Ross revealed during screening, what would your next steps be?
Screening for Substance Use Disorders, Mental Health, and/or Sleep Disorders

Management Strategy
It is important to further address the patient’s grief and risk of possible depression. Set a follow-up appointment to further discuss this.

- Also refer Mr. Ross to a sleep clinic for a formal evaluation.
- Discuss sleep hygiene as an additional strategy.
Thank You!

Questions?